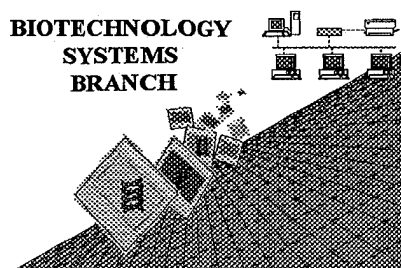


RAW SEQUENCE LISTING **ERROR REPORT**

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number:

09/084,471
01PE

Art Unit / Team No. :

Date Processed by STIC:

6/4/98

THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,**
- 2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY**

THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

ARTI SHAH 703-308-4212

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

SEQUENCE LISTING

(1) General Information

(i) APPLICANT: Murphy, Patricia
White, Marga
Olson, Sheri
Yoshikawa, Matthew
Jackson, Geoffrey
Eskanderi, Tara
Schryer, Brenda
Park, Michael

Does Not Comply
Corrected Diskette Needed

(ii) TITLE OF THE INVENTION: NOVEL CODING SEQUENCE HAPLOTYPES
OF THE HUMAN BRCA2 GENE

(iii) NUMBER OF SEQUENCES: 111 (see next page)

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Howrey & Simon
(B) STREET: 1299 Pennsylvania Avenue N.W.
(C) CITY: Washington
(D) STATE: DC
(E) COUNTRY: USA
(F) ZIP: 20004

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Diskette
(B) COMPUTER: IBM Compatible
(C) OPERATING SYSTEM: DOS
(D) SOFTWARE: FastSEQ for Windows Version 2.0

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER:
(B) FILING DATE:
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER:
(B) FILING DATE:

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Halluin, Albert P

IMPORTANT:
This file was not
saved in ASCII (DOS)
text, required by
Sequence Rules. Please
ensure your corrected
disk file is saved
in ASCII text, or
the PTO will not
process it.

09/084,471

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(A) NAME/KEY:

(B) LOCATION:

(D) OTHER INFORMATION: 2F primer

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

TGAGTTTTC CTCAGTCACA

20

WHERE IS SEQ ID NO:15?

(2) INFORMATION FOR SEQ ID NO:16:

1 Sequence 15 is deliberately omitted, use the format:

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

This sequence has been deliberately omitted

Leave (iii) NUMBER OF SEQUENCES: response at '11'

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:13

INPUT SET: S26434.raw

46 (B) REGISTRATION NUMBER: 25,227
47 (C) REFERENCE/DOCKET NUMBER: 5371.31.US02
48
49 (ix) TELECOMMUNICATION INFORMATION:
50 (A) TELEPHONE: 650-463-8109
51 (B) TELEFAX: 650-463-8400
52 (C) TELEX:
53
54

ERRORED SEQUENCES FOLLOW:

6733 (2) INFORMATION FOR SEQ ID NO:14:
6734
6735 (i) SEQUENCE CHARACTERISTICS:
6736 (A) LENGTH: 20 base pairs
6737 (B) TYPE: nucleic acid
6738 (C) STRANDEDNESS: single
6739 (D) TOPOLOGY: linear
6740
6741 (ix) FEATURE: *← must follow heading. It must appear on the text will be considered*
--> 6742 (A) NAME/KEY:
--> 6743 (B) LOCATION:
--> 6744 (D) OTHER INFORMATION: 2F primer
6745 *these are subheadings of (ix) FEATURE*
6746 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:
6747
6748 TGAGTTTAC CTCAGTCACA
6749

(Edit Globally)

20

OK --> 6750 (2) INFORMATION FOR SEQ ID NO:16:
6751
6752 (i) SEQUENCE CHARACTERISTICS:
6753 (A) LENGTH: 41 base pairs
6754 (B) TYPE: nucleic acid
6755 (C) STRANDEDNESS: single
6756 (D) TOPOLOGY: linear
6757
6758
6759 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:
6760
6761 CAGGAAACAG CTATGACCCT GTGACGTACT GGGTTTTTAC C
6762

41

6763 (2) INFORMATION FOR SEQ ID NO:17:
6764
6765 (i) SEQUENCE CHARACTERISTICS:
6766 (A) LENGTH: 24 base pairs
6767 (B) TYPE: nucleic acid
6768 (C) STRANDEDNESS: single

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:15

INPUT SET: S26434.raw

6769 (D) TOPOLOGY: linear
6770
6771
--> 6772 (A) NAME/KEY:
--> 6773 (B) LOCATION:
--> 6774 (D) OTHER INFORMATION: 3FII primer
6775
6776 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:
6777
6778 GATCTTTAAC TGTTCTGGGT CACA
6779

24

6780 (2) INFORMATION FOR SEQ ID NO:18:
6781
6782 (i) SEQUENCE CHARACTERISTICS:
6783 (A) LENGTH: 22 base pairs
6784 (B) TYPE: nucleic acid
6785 (C) STRANDEDNESS: single
6786 (D) TOPOLOGY: linear
6787
6788
--> 6789 (A) NAME/KEY:
--> 6790 (B) LOCATION:
--> 6791 (D) OTHER INFORMATION: 3RII primer
6792
6793 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:
6794
6795 CCCAGCATGA CACAATTAAT GA
6796

22

6797 (2) INFORMATION FOR SEQ ID NO:19:
6798
6799 (i) SEQUENCE CHARACTERISTICS:
6800 (A) LENGTH: 44 base pairs
6801 (B) TYPE: nucleic acid
6802 (C) STRANDEDNESS: single
6803 (D) TOPOLOGY: linear
6804
6805
--> 6806 (A) NAME/KEY:
--> 6807 (B) LOCATION:
--> 6808 (D) OTHER INFORMATION: 4F/M 13F primer
6809
6810 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:
6811
6812 TGTAACACGA CGGCCAGTAG AATGCAAATT TATAATCCAG AGTA
6813

44

6814 (2) INFORMATION FOR SEQ ID NO:20:
6815
6816 (i) SEQUENCE CHARACTERISTICS:
6817 (A) LENGTH: 22 base pairs
6818 (B) TYPE: nucleic acid

ETC.

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471

DATE: 06/04/98

TIME: 15:52:16

INPUT SET: S26434.raw

6819 (C) STRANDEDNESS: single
6820 (D) TOPOLOGY: linear
6821
6822
--> 6823 (A) NAME/KEY:
--> 6824 (B) LOCATION:
--> 6825 (D) OTHER INFORMATION: 4R-1A primer
6826
6827 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:
6828
6829 ATCAGATTCA TCTTTATAGA AC
6830

22

6831 (2) INFORMATION FOR SEQ ID NO:21:
6832
6833 (i) SEQUENCE CHARACTERISTICS:
6834 (A) LENGTH: 40 base pairs
6835 (B) TYPE: nucleic acid
6836 (C) STRANDEDNESS: single
6837 (D) TOPOLOGY: linear
6838
6839
--> 6840 (A) NAME/KEY:
--> 6841 (B) LOCATION:
--> 6842 (D) OTHER INFORMATION: 5+6F/M13F primer
6843
6844 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:
6845
6846 TGTAACACGA CGGCCAGTTG TGTTGGCATT TTAAACATCA
6847

40

6848 (2) INFORMATION FOR SEQ ID NO:22:
6849
6850 (i) SEQUENCE CHARACTERISTICS:
6851 (A) LENGTH: 38 base pairs
6852 (B) TYPE: nucleic acid
6853 (C) STRANDEDNESS: single
6854 (D) TOPOLOGY: linear
6855
6856
--> 6857 (A) NAME/KEY:
--> 6858 (B) LOCATION:
--> 6859 (D) OTHER INFORMATION: 5+6R/M13R primer
6860
6861 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:
6862
6863 CAGGAAACAG CTATGACCCA GGGCAAAGGT ATAACGCT
6864

38

6865 (2) INFORMATION FOR SEQ ID NO:23:
6866
6867 (i) SEQUENCE CHARACTERISTICS:
6868 (A) LENGTH: 38 base pairs

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:18

INPUT SET: S26434.raw

6869 (B) TYPE: nucleic acid
6870 (C) STRANDEDNESS: single
6871 (D) TOPOLOGY: linear
6872
6873
--> 6874 (A) NAME/KEY:
--> 6875 (B) LOCATION:
--> 6876 (D) OTHER INFORMATION: 7F/M13F primer
6877
6878 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:
6879
6880 TGTAACACGA CGGCCAGTTA AGTGAAATAA AGAGTGAA
6881

38

6882 (2) INFORMATION FOR SEQ ID NO:24:
6883
6884 (i) SEQUENCE CHARACTERISTICS:
6885 (A) LENGTH: 36 base pairs
6886 (B) TYPE: nucleic acid
6887 (C) STRANDEDNESS: single
6888 (D) TOPOLOGY: linear
6889
6890
--> 6891 (A) NAME/KEY:
--> 6892 (B) LOCATION:
--> 6893 (D) OTHER INFORMATION: 7R/M13R primer
6894
6895 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:
6896
6897 CAGGAAACAG CTATGACCAG AAGTATTAGA GATGAC
6898

36

6899 (2) INFORMATION FOR SEQ ID NO:25:
6900
6901 (i) SEQUENCE CHARACTERISTICS:
6902 (A) LENGTH: 40 base pairs
6903 (B) TYPE: nucleic acid
6904 (C) STRANDEDNESS: single
6905 (D) TOPOLOGY: linear
6906
6907
--> 6908 (A) NAME/KEY:
--> 6909 (B) LOCATION:
--> 6910 (D) OTHER INFORMATION: 8F/M13F primer
6911
6912 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:
6913
6914 TGTAACACGA CGGCCAGTGC CATATCTTAC CACCTTGTA
6915

40

6934 (2) INFORMATION FOR SEQ ID NO:27:
6935
6936 (i) SEQUENCE CHARACTERISTICS:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:19

INPUT SET: S26434.raw

6937 (A) LENGTH: 19 base pairs
6938 (B) TYPE: nucleic acid
6939 (C) STRANDEDNESS: single
6940 (D) TOPOLOGY: linear
6941
6942
--> 6943 (A) NAME/KEY:
--> 6944 (B) LOCATION:
--> 6945 (D) OTHER INFORMATION: 8RIA primer
6946
6947 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:
6948
6949 AATTGTTAGC AATTTCAAC
6950

19

6951 (2) INFORMATION FOR SEQ ID NO:28:
6952
6953 (i) SEQUENCE CHARACTERISTICS:
6954 (A) LENGTH: 40 base pairs
6955 (B) TYPE: nucleic acid
6956 (C) STRANDEDNESS: single
6957 (D) TOPOLOGY: linear
6958
6959
--> 6960 (A) NAME/KEY:
--> 6961 (B) LOCATION:
--> 6962 (D) OTHER INFORMATION: 9F/M13F primer
6963
6964 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:
6965
6966 TGTAACACGA CGGCCAGTTG GACCTAGGTT GATTGCAGAT
6967

40

6968 (2) INFORMATION FOR SEQ ID NO:29:
6969
6970 (i) SEQUENCE CHARACTERISTICS:
6971 (A) LENGTH: 40 base pairs
6972 (B) TYPE: nucleic acid
6973 (C) STRANDEDNESS: single
6974 (D) TOPOLOGY: linear
6975
6976
--> 6977 (A) NAME/KEY:
--> 6978 (B) LOCATION:
--> 6979 (D) OTHER INFORMATION: 9R/M13R primer
6980
6981 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:
6982
6983 CAGGAAACAG CTATGACCTA AACTGAGATC ACGGGTGACA
6984

40

6985 (2) INFORMATION FOR SEQ ID NO:30:
6986

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:21

INPUT SET: S26434.raw

6987 (i) SEQUENCE CHARACTERISTICS:
6988 (A) LENGTH: 24 base pairs
6989 (B) TYPE: nucleic acid
6990 (C) STRANDEDNESS: single
6991 (D) TOPOLOGY: linear
6992
6993
--> 6994 (A) NAME/KEY:
--> 6995 (B) LOCATION:
--> 6996 (D) OTHER INFORMATION: 10AF primer
6997
6998 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:
6999
7000 GAATAATATA AATTATATGG CTTA
7001

24

7002 (2) INFORMATION FOR SEQ ID NO:31:
7003
7004 (i) SEQUENCE CHARACTERISTICS:
7005 (A) LENGTH: 37 base pairs
7006 (B) TYPE: nucleic acid
7007 (C) STRANDEDNESS: single
7008 (D) TOPOLOGY: linear
7009
7010
--> 7011 (A) NAME/KEY:
--> 7012 (B) LOCATION:
--> 7013 (D) OTHER INFORMATION: 10AR/M13R primer
7014
7015 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:
7016
7017 CAGGAAACAG CTATGACCCC TAGTCTTGCT AGTTCTT
7018

37

7019 (2) INFORMATION FOR SEQ ID NO:32:
7020
7021 (i) SEQUENCE CHARACTERISTICS:
7022 (A) LENGTH: 42 base pairs
7023 (B) TYPE: nucleic acid
7024 (C) STRANDEDNESS: single
7025 (D) TOPOLOGY: linear
7026
7027
--> 7028 (A) NAME/KEY:
--> 7029 (B) LOCATION:
--> 7030 (D) OTHER INFORMATION: 10BF/M13F primer
7031
7032 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:
7033
7034 TGTAACACGA CGGCCAGTAR CTGAAGTGGA ACCAAATGAT AC
7035

42

7036 (2) INFORMATION FOR SEQ ID NO:33:

INPUT SET: S26434.raw

7037
7038 (i) SEQUENCE CHARACTERISTICS:
7039 (A) LENGTH: 44 base pairs
7040 (B) TYPE: nucleic acid
7041 (C) STRANDEDNESS: single
7042 (D) TOPOLOGY: linear
7043
7044
--> 7045 (A) NAME/KEY:
--> 7046 (B) LOCATION:
--> 7047 (D) OTHER INFORMATION: 10BR/M13R primer
7048
7049 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:
7050
7051 CAGGAAACAG CTATGACCAC GTGGCAAAGA ATTCTCTGAA GTAA 44
7052

7071 (2) INFORMATION FOR SEQ ID NO:35:
7072
7073 (i) SEQUENCE CHARACTERISTICS:
7074 (A) LENGTH: 19 base pairs
7075 (B) TYPE: nucleic acid
7076 (C) STRANDEDNESS: single
7077 (D) TOPOLOGY: linear
7078
7079
--> 7080 (A) NAME/KEY:
--> 7081 (B) LOCATION:
--> 7082 (D) OTHER INFORMATION: 10CRII primer
7083
7084 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:
7085
7086 AGACAGAGGT ACCTGAATC 19
7087

7088 (2) INFORMATION FOR SEQ ID NO:36:
7089
7090 (i) SEQUENCE CHARACTERISTICS:
7091 (A) LENGTH: 40 base pairs
7092 (B) TYPE: nucleic acid
7093 (C) STRANDEDNESS: single
7094 (D) TOPOLOGY: linear
7095
7096
--> 7097 (A) NAME/KEY:
--> 7098 (B) LOCATION:
--> 7099 (D) OTHER INFORMATION: 11AF-M13 primer
7100
7101 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:
7102
7103 TGTAACACGA CGGCCAGTTG GTACTTTAAT TTTGTCACTT 40
7104

7105 (2) INFORMATION FOR SEQ ID NO:37:

INPUT SET: S26434.raw

7106
7107 (i) SEQUENCE CHARACTERISTICS:
7108 (A) LENGTH: 37 base pairs
7109 (B) TYPE: nucleic acid
7110 (C) STRANDEDNESS: single
7111 (D) TOPOLOGY: linear
7112
7113
--> 7114 (A) NAME/KEY:
--> 7115 (B) LOCATION:
--> 7116 (D) OTHER INFORMATION: 11AR-M13 primer
7117
7118 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:
7119
7120 CAGGAAACAG CTATGACCTG CAGGCATGAC AGAGAAT 37
7121

7122 (2) INFORMATION FOR SEQ ID NO:38:
7123
7124 (i) SEQUENCE CHARACTERISTICS:
7125 (A) LENGTH: 22 base pairs
7126 (B) TYPE: nucleic acid
7127 (C) STRANDEDNESS: single
7128 (D) TOPOLOGY: linear
7129
7130
--> 7131 (A) NAME/KEY:
--> 7132 (B) LOCATION:
--> 7133 (D) OTHER INFORMATION: 11BF primer
7134
7135 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:
7136
7137 AAGAAGCAAA ATGTAATAAG GA 22
7138

7139 (2) INFORMATION FOR SEQ ID NO:39:
7140
7141 (i) SEQUENCE CHARACTERISTICS:
7142 (A) LENGTH: 22 base pairs
7143 (B) TYPE: nucleic acid
7144 (C) STRANDEDNESS: single
7145 (D) TOPOLOGY: linear
7146
7147
--> 7148 (A) NAME/KEY:
--> 7149 (B) LOCATION:
--> 7150 (D) OTHER INFORMATION: 11BR primer
7151
7152 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:
7153
7154 CATTTAAAGC ACATACATCT TG 22
7155

7156 (2) INFORMATION FOR SEQ ID NO:40:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:26

INPUT SET: S26434.raw

7157
7158 (i) SEQUENCE CHARACTERISTICS:
7159 (A) LENGTH: 21 base pairs
7160 (B) TYPE: nucleic acid
7161 (C) STRANDEDNESS: single
7162 (D) TOPOLOGY: linear
7163
7164
--> 7165 (A) NAME/KEY:
--> 7166 (B) LOCATION:
--> 7167 (D) OTHER INFORMATION: 11CF primer
7168
7169 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:
7170
7171 TCTAGAGGCA AAGAATCATA C 21
7172

7173 (2) INFORMATION FOR SEQ ID NO:41:
7174
7175 (i) SEQUENCE CHARACTERISTICS:
7176 (A) LENGTH: 22 base pairs
7177 (B) TYPE: nucleic acid
7178 (C) STRANDEDNESS: single
7179 (D) TOPOLOGY: linear
7180
7181
--> 7182 (A) NAME/KEY:
--> 7183 (B) LOCATION:
--> 7184 (D) OTHER INFORMATION: 11CR primer
7185
7186 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:
7187
7188 CAAGATTATT CCTTTCATTA GC 22
7189

7190 (2) INFORMATION FOR SEQ ID NO:42:
7191
7192 (i) SEQUENCE CHARACTERISTICS:
7193 (A) LENGTH: 22 base pairs
7194 (B) TYPE: nucleic acid
7195 (C) STRANDEDNESS: single
7196 (D) TOPOLOGY: linear
7197
7198
--> 7199 (A) NAME/KEY:
--> 7200 (B) LOCATION:
--> 7201 (D) OTHER INFORMATION: 11DF primer
7202
7203 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:
7204
7205 AACCAAAACA CAAATCTAAG AG 22
7206

7207 (2) INFORMATION FOR SEQ ID NO:43:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:28

INPUT SET: S26434.raw

7208
7209 (i) SEQUENCE CHARACTERISTICS:
7210 (A) LENGTH: 23 base pairs
7211 (B) TYPE: nucleic acid
7212 (C) STRANDEDNESS: single
7213 (D) TOPOLOGY: linear
7214
7215
--> 7216 (A) NAME/KEY:
--> 7217 (B) LOCATION:
--> 7218 (D) OTHER INFORMATION: 11DR primer
7219
7220 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:
7221
7222 GTCATTTTTA TATGCTGCTT TAC 23
7223

7224 (2) INFORMATION FOR SEQ ID NO:44:
7225
7226 (i) SEQUENCE CHARACTERISTICS:
7227 (A) LENGTH: 21 base pairs
7228 (B) TYPE: nucleic acid
7229 (C) STRANDEDNESS: single
7230 (D) TOPOLOGY: linear
7231
7232
--> 7233 (A) NAME/KEY:
--> 7234 (B) LOCATION:
--> 7235 (D) OTHER INFORMATION: 11EF primer
7236
7237 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:
7238
7239 GGTTTTATAT GGAGACACAG G 21
7240

7241 (2) INFORMATION FOR SEQ ID NO:45:
7242
7243 (i) SEQUENCE CHARACTERISTICS:
7244 (A) LENGTH: 23 base pairs
7245 (B) TYPE: nucleic acid
7246 (C) STRANDEDNESS: single
7247 (D) TOPOLOGY: linear
7248
7249
--> 7250 (A) NAME/KEY:
--> 7251 (B) LOCATION:
--> 7252 (D) OTHER INFORMATION: 11ER primer
7253
7254 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:
7255
7256 GTATTTACAA TTTCAACACA AGC 23
7257

7258 (2) INFORMATION FOR SEQ ID NO:46:

INPUT SET: S26434.raw

7259
7260 (i) SEQUENCE CHARACTERISTICS:
7261 (A) LENGTH: 20 base pairs
7262 (B) TYPE: nucleic acid
7263 (C) STRANDEDNESS: single
7264 (D) TOPOLOGY: linear
7265
7266
--> 7267 (A) NAME/KEY:
--> 7268 (B) LOCATION:
--> 7269 (D) OTHER INFORMATION: 11FF primer
7270
7271 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:
7272
7273 ATCACAGTTT TGGAGGTAGC 20
7274

7275 (2) INFORMATION FOR SEQ ID NO:47:
7276
7277 (i) SEQUENCE CHARACTERISTICS:
7278 (A) LENGTH: 21 base pairs
7279 (B) TYPE: nucleic acid
7280 (C) STRANDEDNESS: single
7281 (D) TOPOLOGY: linear
7282
7283
--> 7284 (A) NAME/KEY:
--> 7285 (B) LOCATION:
--> 7286 (D) OTHER INFORMATION: 11FR primer
7287
7288 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:
7289
7290 CTGACTTCCT GATTCTTCTA A 21
7291

7292 (2) INFORMATION FOR SEQ ID NO:48:
7293
7294 (i) SEQUENCE CHARACTERISTICS:
7295 (A) LENGTH: 21 base pairs
7296 (B) TYPE: nucleic acid
7297 (C) STRANDEDNESS: single
7298 (D) TOPOLOGY: linear
7299
7300
--> 7301 (A) NAME/KEY:
--> 7302 (B) LOCATION:
--> 7303 (D) OTHER INFORMATION: 11GF primer
7304
7305 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:
7306
7307 CTCAGATGTT ATTTTCCAAG C 21
7308

7309 (2) INFORMATION FOR SEQ ID NO:49:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:31

INPUT SET: S26434.raw

7310
7311 (i) SEQUENCE CHARACTERISTICS:
7312 (A) LENGTH: 21 base pairs
7313 (B) TYPE: nucleic acid
7314 (C) STRANDEDNESS: single
7315 (D) TOPOLOGY: linear
7316
7317
--> 7318 (A) NAME/KEY:
--> 7319 (B) LOCATION:
--> 7320 (D) OTHER INFORMATION: 11GR primer
7321
7322 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:
7323
7324 CTGTTAAATA ACCAGAAGCA C 21
7325

7326 (2) INFORMATION FOR SEQ ID NO:50:
7327
7328 (i) SEQUENCE CHARACTERISTICS:
7329 (A) LENGTH: 18 base pairs
7330 (B) TYPE: nucleic acid
7331 (C) STRANDEDNESS: single
7332 (D) TOPOLOGY: linear
7333
7334
--> 7335 (A) NAME/KEY:
--> 7336 (B) LOCATION:
--> 7337 (D) OTHER INFORMATION: 11HF primer
7338
7339 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:
7340
7341 AGGTAGACAG CAGCAAGC 18
7342

7361 (2) INFORMATION FOR SEQ ID NO:52:
7362
7363 (i) SEQUENCE CHARACTERISTICS:
7364 (A) LENGTH: 21 base pairs
7365 (B) TYPE: nucleic acid
7366 (C) STRANDEDNESS: single
7367 (D) TOPOLOGY: linear
7368
7369
--> 7370 (A) NAME/KEY:
--> 7371 (B) LOCATION:
--> 7372 (D) OTHER INFORMATION: 11IF primer
7373
7374 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:
7375
7376 TGCAGAGGTA CATCCAATAA G 21
7377

7378 (2) INFORMATION FOR SEQ ID NO:53:

INPUT SET: S26434.raw

7379
7380 (i) SEQUENCE CHARACTERISTICS:
7381 (A) LENGTH: 21 base pairs
7382 (B) TYPE: nucleic acid
7383 (C) STRANDEDNESS: single
7384 (D) TOPOLOGY: linear
7385
7386
--> 7387 (A) NAME/KEY:
--> 7388 (B) LOCATION:
--> 7389 (D) OTHER INFORMATION: 11IR primer
7390
7391 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:
7392
7393 GATCAGTAAA TAGCAAGTCC G 21
7394

7395 (2) INFORMATION FOR SEQ ID NO:54:
7396
7397 (i) SEQUENCE CHARACTERISTICS:
7398 (A) LENGTH: 23 base pairs
7399 (B) TYPE: nucleic acid
7400 (C) STRANDEDNESS: single
7401 (D) TOPOLOGY: linear
7402
7403
--> 7404 (A) NAME/KEY:
--> 7405 (B) LOCATION:
--> 7406 (D) OTHER INFORMATION: 11JF primer
7407
7408 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:
7409
7410 TACTGAAAAT GAAGATAACA AAT 23
7411

7412 (2) INFORMATION FOR SEQ ID NO:55:
7413
7414 (i) SEQUENCE CHARACTERISTICS:
7415 (A) LENGTH: 22 base pairs
7416 (B) TYPE: nucleic acid
7417 (C) STRANDEDNESS: single
7418 (D) TOPOLOGY: linear
7419
7420
--> 7421 (A) NAME/KEY:
--> 7422 (B) LOCATION:
--> 7423 (D) OTHER INFORMATION: !!JR primer
7424
7425 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:
7426
7427 ATTTTGTCTTCT TTCTTATGTC AG 22
7428

7429 (2) INFORMATION FOR SEQ ID NO:56:

INPUT SET: S26434.raw

7430
7431 (i) SEQUENCE CHARACTERISTICS:
7432 (A) LENGTH: 35 base pairs
7433 (B) TYPE: nucleic acid
7434 (C) STRANDEDNESS: single
7435 (D) TOPOLOGY: linear
7436
7437
--> 7438 (A) NAME/KEY:
--> 7439 (B) LOCATION:
--> 7440 (D) OTHER INFORMATION: 11KF-M13 primer
7441
7442 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:
7443
7444 TGTAACACGA CGGCCAGTCT ACTAACACGG AGCAA 35
7445

7446 (2) INFORMATION FOR SEQ ID NO:57:
7447
7448 (i) SEQUENCE CHARACTERISTICS:
7449 (A) LENGTH: 35 base pairs
7450 (B) TYPE: nucleic acid
7451 (C) STRANDEDNESS: single
7452 (D) TOPOLOGY: linear
7453
7454
--> 7455 (A) NAME/KEY:
--> 7456 (B) LOCATION:
--> 7457 (D) OTHER INFORMATION: 11KR-M13 primer
7458
7459 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:
7460
7461 CAGGAAACAG CTATGACCGT ATGAAAACCC AACAG 35
7462

7463 (2) INFORMATION FOR SEQ ID NO:58:
7464
7465 (i) SEQUENCE CHARACTERISTICS:
7466 (A) LENGTH: 22 base pairs
7467 (B) TYPE: nucleic acid
7468 (C) STRANDEDNESS: single
7469 (D) TOPOLOGY: linear
7470
7471
--> 7472 (A) NAME/KEY:
--> 7473 (B) LOCATION:
--> 7474 (D) OTHER INFORMATION: 11LF primer
7475
7476 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:
7477
7478 CACAAAATAC TGAAAGAAAG TG 22
7479

7480 (2) INFORMATION FOR SEQ ID NO:59:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:36

INPUT SET: S26434.raw

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(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 19 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(A) NAME/KEY:
(B) LOCATION:
(D) OTHER INFORMATION: 11LR primer

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:
GGCACCACAG TCTCAATAG 19

7497
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(2) INFORMATION FOR SEQ ID NO:60:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(A) NAME/KEY:
(B) LOCATION:
(D) OTHER INFORMATION: 11MF primer

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:
GCAAAGACCC TAAAGTACAG 20

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(2) INFORMATION FOR SEQ ID NO:61:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 22 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(A) NAME/KEY:
(B) LOCATION:
(D) OTHER INFORMATION: 11MR primer

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:
CATCAAATAT TCCTTCTCTA AG 22

7531

(2) INFORMATION FOR SEQ ID NO:62:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:38

INPUT SET: S26434.raw

7532
7533 (i) SEQUENCE CHARACTERISTICS:
7534 (A) LENGTH: 35 base pairs
7535 (B) TYPE: nucleic acid
7536 (C) STRANDEDNESS: single
7537 (D) TOPOLOGY: linear
7538
7539
--> 7540 (A) NAME/KEY:
--> 7541 (B) LOCATION:
--> 7542 (D) OTHER INFORMATION: 11NF-M13 primer
7543
7544 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:
7545
7546 TGTAACACGA CGGCCAGTGA AAATTCAGCC TTAGC 35
7547

7548 (2) INFORMATION FOR SEQ ID NO:63:
7549
7550 (i) SEQUENCE CHARACTERISTICS:
7551 (A) LENGTH: 35 base pairs
7552 (B) TYPE: nucleic acid
7553 (C) STRANDEDNESS: single
7554 (D) TOPOLOGY: linear
7555
7556
--> 7557 (A) NAME/KEY:
--> 7558 (B) LOCATION:
--> 7559 (D) OTHER INFORMATION: 11NR-M13 primer
7560
7561 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:
7562
7563 CAGGAAACAG CTATGACCAT CAGAATGGTA GGAAT 35
7564

7565 (2) INFORMATION FOR SEQ ID NO:64:
7566
7567 (i) SEQUENCE CHARACTERISTICS:
7568 (A) LENGTH: 22 base pairs
7569 (B) TYPE: nucleic acid
7570 (C) STRANDEDNESS: single
7571 (D) TOPOLOGY: linear
7572
7573
--> 7574 (A) NAME/KEY:
--> 7575 (B) LOCATION:
--> 7576 (D) OTHER INFORMATION: 11OF primer
7577
7578 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:
7579
7580 GTACTATAGC TGAAAATGAC AA 22
7581

7582 (2) INFORMATION FOR SEQ ID NO:65:

INPUT SET: S26434.raw

7583
7584
7585 (i) SEQUENCE CHARACTERISTICS:
7586 (A) LENGTH: 20 base pairs
7587 (B) TYPE: nucleic acid
7588 (C) STRANDEDNESS: single
7589 (D) TOPOLOGY: linear
7590
--> 7591 (A) NAME/KEY:
--> 7592 (B) LOCATION:
--> 7593 (D) OTHER INFORMATION: 11OR primer
7594
7595 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:
7596
7597 ACCACTGGCT ATCCTAAATG 20
7598

7599 (2) INFORMATION FOR SEQ ID NO:66:
7600
7601 (i) SEQUENCE CHARACTERISTICS:
7602 (A) LENGTH: 20 base pairs
7603 (B) TYPE: nucleic acid
7604 (C) STRANDEDNESS: single
7605 (D) TOPOLOGY: linear
7606
--> 7608 (A) NAME/KEY:
--> 7609 (B) LOCATION:
--> 7610 (D) OTHER INFORMATION: 11PF primer
7611
7612 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:
7613
7614 TGAAGATATT TGCCTTGAGG 20
7615

7616 (2) INFORMATION FOR SEQ ID NO:67:
7617
7618 (i) SEQUENCE CHARACTERISTICS:
7619 (A) LENGTH: 20 base pairs
7620 (B) TYPE: nucleic acid
7621 (C) STRANDEDNESS: single
7622 (D) TOPOLOGY: linear
7623
--> 7625 (A) NAME/KEY:
--> 7626 (B) LOCATION:
--> 7627 (D) OTHER INFORMATION: 11PR primer
7628
7629 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:
7630
7631 GTCAGCAAAA ACCTTATGTG 20
7632

7633 (2) INFORMATION FOR SEQ ID NO:68:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:41

INPUT SET: S26434.raw

7634
7635 (i) SEQUENCE CHARACTERISTICS:
7636 (A) LENGTH: 21 base pairs
7637 (B) TYPE: nucleic acid
7638 (C) STRANDEDNESS: single
7639 (D) TOPOLOGY: linear
7640
7641
--> 7642 (A) NAME/KEY:
--> 7643 (B) LOCATION:
--> 7644 (D) OTHER INFORMATION: 11QF primer
7645
7646 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:
7647
7648 ACGAAAATTA TGGCAGGTTG T 21
7649

7650 (2) INFORMATION FOR SEQ ID NO:69:
7651
7652 (i) SEQUENCE CHARACTERISTICS:
7653 (A) LENGTH: 21 base pairs
7654 (B) TYPE: nucleic acid
7655 (C) STRANDEDNESS: single
7656 (D) TOPOLOGY: linear
7657
7658
--> 7659 (A) NAME/KEY:
--> 7660 (B) LOCATION:
--> 7661 (D) OTHER INFORMATION: 11QR primer
7662
7663 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:
7664
7665 CTTGTCTTGC GTTTTGTAAT G 21
7666

7667 (2) INFORMATION FOR SEQ ID NO:70:
7668
7669 (i) SEQUENCE CHARACTERISTICS:
7670 (A) LENGTH: 20 base pairs
7671 (B) TYPE: nucleic acid
7672 (C) STRANDEDNESS: single
7673 (D) TOPOLOGY: linear
7674
7675
--> 7676 (A) NAME/KEY:
--> 7677 (B) LOCATION:
--> 7678 (D) OTHER INFORMATION: 11RF primer
7679
7680 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:
7681
7682 GCTTCATAAG TCACTCTCAT 20
7683

7684 (2) INFORMATION FOR SEQ ID NO:71:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:42

INPUT SET: S26434.raw

7685
7686 (i) SEQUENCE CHARACTERISTICS:
7687 (A) LENGTH: 20 base pairs
7688 (B) TYPE: nucleic acid
7689 (C) STRANDEDNESS: single
7690 (D) TOPOLOGY: linear
7691
7692
--> 7693 (A) NAME/KEY:
--> 7694 (B) LOCATION:
--> 7695 (D) OTHER INFORMATION: 11RR primer
7696
7697 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:
7698
7699 TCAAATTCCT CTAACACTCC
7700

20

7701 (2) INFORMATION FOR SEQ ID NO:72:
7702
7703 (i) SEQUENCE CHARACTERISTICS:
7704 (A) LENGTH: 35 base pairs
7705 (B) TYPE: nucleic acid
7706 (C) STRANDEDNESS: single
7707 (D) TOPOLOGY: linear
7708
7709
--> 7710 (A) NAME/KEY:
--> 7711 (B) LOCATION:
--> 7712 (D) OTHER INFORMATION: 11SF-M13 primer
7713
7714 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:
7715
7716 TGTA AACGA CGGCCAGTTA CAGCAAGTGG AAAGC
7717

35

7718 (2) INFORMATION FOR SEQ ID NO:73:
7719
7720 (i) SEQUENCE CHARACTERISTICS:
7721 (A) LENGTH: 37 base pairs
7722 (B) TYPE: nucleic acid
7723 (C) STRANDEDNESS: single
7724 (D) TOPOLOGY: linear
7725
7726
--> 7727 (A) NAME/KEY:
--> 7728 (B) LOCATION:
--> 7729 (D) OTHER INFORMATION: 11SR-M13 primer
7730
7731 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:
7732
7733 CAGGAAACAG CTATGACCAA GTTTCAGTTT TACCAAT
7734

37

7735 (2) INFORMATION FOR SEQ ID NO:74:

INPUT SET: S26434.raw

7736
7737
7738 (i) SEQUENCE CHARACTERISTICS:
7739 (A) LENGTH: 22 base pairs
7740 (B) TYPE: nucleic acid
7741 (C) STRANDEDNESS: single
7742 (D) TOPOLOGY: linear
7743
--> 7744 (A) NAME/KEY:
--> 7745 (B) LOCATION:
--> 7746 (D) OTHER INFORMATION: 11TF primer
7747
7748 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:
7749
7750 GTTCTTCAGA AAATAATCAC TC 22
7751

7752 (2) INFORMATION FOR SEQ ID NO:75:
7753
7754 (i) SEQUENCE CHARACTERISTICS:
7755 (A) LENGTH: 21 base pairs
7756 (B) TYPE: nucleic acid
7757 (C) STRANDEDNESS: single
7758 (D) TOPOLOGY: linear
7759
7760
--> 7761 (A) NAME/KEY:
--> 7762 (B) LOCATION:
--> 7763 (D) OTHER INFORMATION: 11TR primer
7764
7765 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:
7766
7767 TGTA AAAAGA GAATGTGTGG C 21
7768

7769 (2) INFORMATION FOR SEQ ID NO:76:
7770
7771 (i) SEQUENCE CHARACTERISTICS:
7772 (A) LENGTH: 39 base pairs
7773 (B) TYPE: nucleic acid
7774 (C) STRANDEDNESS: single
7775 (D) TOPOLOGY: linear
7776
7777
--> 7778 (A) NAME/KEY:
--> 7779 (B) LOCATION:
--> 7780 (D) OTHER INFORMATION: 11UF-M13 primer
7781
7782 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:
7783
7784 TGTA AAACGA CGGCCAGTAC TTTTCTGAT GTTCCTGTG 39
7785

7786 (2) INFORMATION FOR SEQ ID NO:77:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:46

INPUT SET: S26434.raw

7787
7788 (i) SEQUENCE CHARACTERISTICS:
7789 (A) LENGTH: 39 base pairs
7790 (B) TYPE: nucleic acid
7791 (C) STRANDEDNESS: single
7792 (D) TOPOLOGY: linear
7793
7794
--> 7795 (A) NAME/KEY:
--> 7796 (B) LOCATION:
--> 7797 (D) OTHER INFORMATION: 11UR-M13 primer
7798
7799 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:
7800
7801 CAGGAAACAG CTATGACCTA AAAATAGTGA TTGGCAACA 39
7802

7803 (2) INFORMATION FOR SEQ ID NO:78:
7804
7805 (i) SEQUENCE CHARACTERISTICS:
7806 (A) LENGTH: 42 base pairs
7807 (B) TYPE: nucleic acid
7808 (C) STRANDEDNESS: single
7809 (D) TOPOLOGY: linear
7810
7811
--> 7812 (A) NAME/KEY:
--> 7813 (B) LOCATION:
--> 7814 (D) OTHER INFORMATION: 12F/M13F primer
7815
7816 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:
7817
7818 TGTAAAACGA CGGCCAGTAG TGGTGTTTTA AAGTGGTCAA AA 42
7819

7820 (2) INFORMATION FOR SEQ ID NO:79:
7821
7822 (i) SEQUENCE CHARACTERISTICS:
7823 (A) LENGTH: 40 base pairs
7824 (B) TYPE: nucleic acid
7825 (C) STRANDEDNESS: single
7826 (D) TOPOLOGY: linear
7827
7828
--> 7829 (A) NAME/KEY:
--> 7830 (B) LOCATION:
--> 7831 (D) OTHER INFORMATION: 12R/M13R primer
7832
7833 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:
7834
7835 CAGGAAACAG CTATGACCGG ATCCACCTGA GGTGAGAATA 40
7836

7837 (2) INFORMATION FOR SEQ ID NO:80:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:47

INPUT SET: S26434.raw

7838
7839 (i) SEQUENCE CHARACTERISTICS:
7840 (A) LENGTH: 21 base pairs
7841 (B) TYPE: nucleic acid
7842 (C) STRANDEDNESS: single
7843 (D) TOPOLOGY: linear
7844
7845
--> 7846 (A) NAME/KEY:
--> 7847 (B) LOCATION:
--> 7848 (D) OTHER INFORMATION: 13-2F primer
7849
7850 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:
7851
7852 TAACATTTAA GCATCCGTTA C 21
7853

7854 (2) INFORMATION FOR SEQ ID NO:81:
7855
7856 (i) SEQUENCE CHARACTERISTICS:
7857 (A) LENGTH: 28 base pairs
7858 (B) TYPE: nucleic acid
7859 (C) STRANDEDNESS: single
7860 (D) TOPOLOGY: linear
7861
7862
--> 7863 (A) NAME/KEY:
--> 7864 (B) LOCATION:
--> 7865 (D) OTHER INFORMATION: 13-2R primer
7866
7867 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:
7868
7869 AAACGAGACT TTTCTCATAC TGTATTAG 28
7870

7871 (2) INFORMATION FOR SEQ ID NO:82:
7872
7873 (i) SEQUENCE CHARACTERISTICS:
7874 (A) LENGTH: 22 base pairs
7875 (B) TYPE: nucleic acid
7876 (C) STRANDEDNESS: single
7877 (D) TOPOLOGY: linear
7878
7879
--> 7880 (A) NAME/KEY:
--> 7881 (B) LOCATION:
--> 7882 (D) OTHER INFORMATION: 14F primer
7883
7884 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:
7885
7886 ACCATGTAGC AAATGAGGGT CT 22
7887

7888 (2) INFORMATION FOR SEQ ID NO:83:

INPUT SET: S26434.raw

7889
7890 (i) SEQUENCE CHARACTERISTICS:
7891 (A) LENGTH: 22 base pairs
7892 (B) TYPE: nucleic acid
7893 (C) STRANDEDNESS: single
7894 (D) TOPOLOGY: linear
7895
7896
--> 7897 (A) NAME/KEY:
--> 7898 (B) LOCATION:
--> 7899 (D) OTHER INFORMATION: 14AR primer
7900
7901 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:
7902
7903 GCTTTTGTCT GTTTTCCTCC AA 22
7904

7905 (2) INFORMATION FOR SEQ ID NO:84:
7906
7907 (i) SEQUENCE CHARACTERISTICS:
7908 (A) LENGTH: 21 base pairs
7909 (B) TYPE: nucleic acid
7910 (C) STRANDEDNESS: single
7911 (D) TOPOLOGY: linear
7912
7913
--> 7914 (A) NAME/KEY:
--> 7915 (B) LOCATION:
--> 7916 (D) OTHER INFORMATION: 15-2F primer
7917
7918 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:
7919
7920 CCAGGGGTTG TGCTTTTAA A 21
7921

7922 (2) INFORMATION FOR SEQ ID NO:85:
7923
7924 (i) SEQUENCE CHARACTERISTICS:
7925 (A) LENGTH: 38 base pairs
7926 (B) TYPE: nucleic acid
7927 (C) STRANDEDNESS: single
7928 (D) TOPOLOGY: linear
7929
7930
--> 7931 (A) NAME/KEY:
--> 7932 (B) LOCATION:
--> 7933 (D) OTHER INFORMATION: 15FUT/M13-R primer
7934
7935 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:
7936
7937 CAGGAAACAG CTATGACCAC TCTGTCATAA AAGCCATC 38
7938

7939 (2) INFORMATION FOR SEQ ID NO:86:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:51

INPUT SET: S26434.raw

7940
7941 (i) SEQUENCE CHARACTERISTICS:
7942 (A) LENGTH: 24 base pairs
7943 (B) TYPE: nucleic acid
7944 (C) STRANDEDNESS: single
7945 (D) TOPOLOGY: linear
7946
7947
--> 7948 (A) NAME/KEY:
--> 7949 (B) LOCATION:
--> 7950 (D) OTHER INFORMATION: 16AF primer
7951
7952 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:
7953
7954 TTTGGTTTGT TATAATTGTT TTTA 24
7955

7956 (2) INFORMATION FOR SEQ ID NO:87:
7957
7958 (i) SEQUENCE CHARACTERISTICS:
7959 (A) LENGTH: 20 base pairs
7960 (B) TYPE: nucleic acid
7961 (C) STRANDEDNESS: single
7962 (D) TOPOLOGY: linear
7963
7964
--> 7965 (A) NAME/KEY:
--> 7966 (B) LOCATION:
--> 7967 (D) OTHER INFORMATION: 16AR primer
7968
7969 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:
7970
7971 CCAACTTTTT AGTTCGAGAG 20
7972

7973 (2) INFORMATION FOR SEQ ID NO:88:
7974
7975 (i) SEQUENCE CHARACTERISTICS:
7976 (A) LENGTH: 19 base pairs
7977 (B) TYPE: nucleic acid
7978 (C) STRANDEDNESS: single
7979 (D) TOPOLOGY: linear
7980
7981
--> 7982 (A) NAME/KEY:
--> 7983 (B) LOCATION:
--> 7984 (D) OTHER INFORMATION: 17F primer
7985
7986 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:
7987
7988 TTCAGTATCA TCCTATGTG 19
7989

7990 (2) INFORMATION FOR SEQ ID NO:89:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:52

INPUT SET: S26434.raw

7991
7992 (i) SEQUENCE CHARACTERISTICS:
7993 (A) LENGTH: 20 base pairs
7994 (B) TYPE: nucleic acid
7995 (C) STRANDEDNESS: single
7996 (D) TOPOLOGY: linear
7997
7998
--> 7999 (A) NAME/KEY:
--> 8000 (B) LOCATION:
--> 8001 (D) OTHER INFORMATION: 17AR primer
8002
8003 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:
8004
8005 AGAAACCTTA ACCCATACTG 20
8006

8007 (2) INFORMATION FOR SEQ ID NO:90:
8008
8009 (i) SEQUENCE CHARACTERISTICS:
8010 (A) LENGTH: 39 base pairs
8011 (B) TYPE: nucleic acid
8012 (C) STRANDEDNESS: single
8013 (D) TOPOLOGY: linear
8014
8015
--> 8016 (A) NAME/KEY:
--> 8017 (B) LOCATION:
--> 8018 (D) OTHER INFORMATION: 18FUT/M13-AF primer
8019
8020 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:
8021
8022 TGTAAAACGA CGGCCAGTGA ATTCTAGAGT CACACTTCC 39
8023

8024 (2) INFORMATION FOR SEQ ID NO:91:
8025
8026 (i) SEQUENCE CHARACTERISTICS:
8027 (A) LENGTH: 38 base pairs
8028 (B) TYPE: nucleic acid
8029 (C) STRANDEDNESS: single
8030 (D) TOPOLOGY: linear
8031
8032
--> 8033 (A) NAME/KEY:
--> 8034 (B) LOCATION:
--> 8035 (D) OTHER INFORMATION: 18R/M13R primer
8036
8037 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:
8038
8039 CAGGAAACAG CTATGACCTT TAACTGAATC AATGACTG 38
8040

8041 (2) INFORMATION FOR SEQ ID NO:92:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:54

INPUT SET: S26434.raw

8042
8043
8044 (i) SEQUENCE CHARACTERISTICS:
8045 (A) LENGTH: 41 base pairs
8046 (B) TYPE: nucleic acid
8047 (C) STRANDEDNESS: single
8048 (D) TOPOLOGY: linear
8049
--> 8050 (A) NAME/KEY:
--> 8051 (B) LOCATION:
--> 8052 (D) OTHER INFORMATION: 19F/M13F primer
8053
8054 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:
8055
8056 TGTAACACGA CGGCCAGTAA GTGAATATTT TTAAGGCAGT T 41
8057

8058 (2) INFORMATION FOR SEQ ID NO:93:
8059
8060 (i) SEQUENCE CHARACTERISTICS:
8061 (A) LENGTH: 39 base pairs
8062 (B) TYPE: nucleic acid
8063 (C) STRANDEDNESS: single
8064 (D) TOPOLOGY: linear
8065
8066
--> 8067 (A) NAME/KEY:
--> 8068 (B) LOCATION:
--> 8069 (D) OTHER INFORMATION: 19FUT/M13-R primer
8070
8071 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:
8072
8073 CAGGAAACAG CTATGACCAA GAGACCGAAA CTCCATCTC 39
8074

8075 (2) INFORMATION FOR SEQ ID NO:94:
8076
8077 (i) SEQUENCE CHARACTERISTICS:
8078 (A) LENGTH: 38 base pairs
8079 (B) TYPE: nucleic acid
8080 (C) STRANDEDNESS: single
8081 (D) TOPOLOGY: linear
8082
8083
--> 8084 (A) NAME/KEY:
--> 8085 (B) LOCATION:
--> 8086 (D) OTHER INFORMATION: 20F/M13F primer
8087
8088 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:
8089
8090 TGTAACACGA CGGCCAGTCA CTGTGCCTGG CCTGATAC 38
8091

8092 (2) INFORMATION FOR SEQ ID NO:95:

INPUT SET: S26434.raw

8093
8094
8095 (i) SEQUENCE CHARACTERISTICS:
8096 (A) LENGTH: 39 base pairs
8097 (B) TYPE: nucleic acid
8098 (C) STRANDEDNESS: single
8099 (D) TOPOLOGY: linear
8100
--> 8101 (A) NAME/KEY:
--> 8102 (B) LOCATION:
--> 8103 (D) OTHER INFORMATION: 20R/M13R primer
8104
8105 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:
8106
8107 CAGGAAACAG CTATGACCAT GTTAAATTCA AAGTCTCTA 39
8108

8109 (2) INFORMATION FOR SEQ ID NO:96:
8110
8111 (i) SEQUENCE CHARACTERISTICS:
8112 (A) LENGTH: 39 base pairs
8113 (B) TYPE: nucleic acid
8114 (C) STRANDEDNESS: single
8115 (D) TOPOLOGY: linear
8116
8117
--> 8118 (A) NAME/KEY:
--> 8119 (B) LOCATION:
--> 8120 (D) OTHER INFORMATION: 21F/M13F primer
8121
8122 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:
8123
8124 TGTAACACGA CGGCCAGTGG GTGTTTATG CTTGGTTCT 39
8125

8126 (2) INFORMATION FOR SEQ ID NO:97:
8127
8128 (i) SEQUENCE CHARACTERISTICS:
8129 (A) LENGTH: 40 base pairs
8130 (B) TYPE: nucleic acid
8131 (C) STRANDEDNESS: single
8132 (D) TOPOLOGY: linear
8133
8134
--> 8135 (A) NAME/KEY:
--> 8136 (B) LOCATION:
--> 8137 (D) OTHER INFORMATION: 21R/M13R primer
8138
8139 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:
8140
8141 CAGGAAACAG CTATGACCCA TTTCAACATA TTCCTTCCTG 40
8142

8143 (2) INFORMATION FOR SEQ ID NO:98:

INPUT SET: S26434.raw

8144
8145 (i) SEQUENCE CHARACTERISTICS:
8146 (A) LENGTH: 19 base pairs
8147 (B) TYPE: nucleic acid
8148 (C) STRANDEDNESS: single
8149 (D) TOPOLOGY: linear
8150
8151
--> 8152 (A) NAME/KEY:
--> 8153 (B) LOCATION:
--> 8154 (D) OTHER INFORMATION: 22F-1A primer
8155
8156 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:
8157
8158 AACCACACCC TTAAGATGA 19
8159

8160 (2) INFORMATION FOR SEQ ID NO:99:
8161
8162 (i) SEQUENCE CHARACTERISTICS:
8163 (A) LENGTH: 20 base pairs
8164 (B) TYPE: nucleic acid
8165 (C) STRANDEDNESS: single
8166 (D) TOPOLOGY: linear
8167
8168
--> 8169 (A) NAME/KEY:
--> 8170 (B) LOCATION:
--> 8171 (D) OTHER INFORMATION: 22R-1A primer
8172
8173 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:
8174
8175 GCATTAGTAG TGGATTTTGC 20
8176

8177 (2) INFORMATION FOR SEQ ID NO:100:
8178
8179 (i) SEQUENCE CHARACTERISTICS:
8180 (A) LENGTH: 16 base pairs
8181 (B) TYPE: nucleic acid
8182 (C) STRANDEDNESS: single
8183 (D) TOPOLOGY: linear
8184
8185
--> 8186 (A) NAME/KEY:
--> 8187 (B) LOCATION:
--> 8188 (D) OTHER INFORMATION: 23FII primer
8189
8190 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:
8191
8192 TCACTTCCAT TGCATC 16
8193

8194 (2) INFORMATION FOR SEQ ID NO:101:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:52:59

INPUT SET: S26434.raw

8195
8196 (i) SEQUENCE CHARACTERISTICS:
8197 (A) LENGTH: 17 base pairs
8198 (B) TYPE: nucleic acid
8199 (C) STRANDEDNESS: single
8200 (D) TOPOLOGY: linear
8201
8202
--> 8203 (A) NAME/KEY:
--> 8204 (B) LOCATION:
--> 8205 (D) OTHER INFORMATION: 23RII primer
8206
8207 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:
8208
8209 TGCCAACTGG TAGCTCC 17
8210

8211 (2) INFORMATION FOR SEQ ID NO:102:
8212
8213 (i) SEQUENCE CHARACTERISTICS:
8214 (A) LENGTH: 20 base pairs
8215 (B) TYPE: nucleic acid
8216 (C) STRANDEDNESS: single
8217 (D) TOPOLOGY: linear
8218
8219
--> 8220 (A) NAME/KEY:
--> 8221 (B) LOCATION:
--> 8222 (D) OTHER INFORMATION: 24 2F primer
8223
8224 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:
8225
8226 TACAGTTAGC AGCGACAAAA 20
8227

8228 (2) INFORMATION FOR SEQ ID NO:103:
8229
8230 (i) SEQUENCE CHARACTERISTICS:
8231 (A) LENGTH: 38 base pairs
8232 (B) TYPE: nucleic acid
8233 (C) STRANDEDNESS: single
8234 (D) TOPOLOGY: linear
8235
8236
--> 8237 (A) NAME/KEY:
--> 8238 (B) LOCATION:
--> 8239 (D) OTHER INFORMATION: 24R/M13R primer
8240
8241 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:
8242
8243 CAGGAAACAG CTATGACCAT TTGCCAACTG GTAGCTCC 38
8244

8245 (2) INFORMATION FOR SEQ ID NO:104:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:53:01

INPUT SET: S26434.raw

8246
8247 (i) SEQUENCE CHARACTERISTICS:
8248 (A) LENGTH: 20 base pairs
8249 (B) TYPE: nucleic acid
8250 (C) STRANDEDNESS: single
8251 (D) TOPOLOGY: linear
8252
8253
--> 8254 (A) NAME/KEY:
--> 8255 (B) LOCATION:
--> 8256 (D) OTHER INFORMATION: 25F-7/23 primer
8257
8258 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:
8259
8260 GCTTTCGCCA AATTCAGCTA 20
8261

8262 (2) INFORMATION FOR SEQ ID NO:105:
8263
8264 (i) SEQUENCE CHARACTERISTICS:
8265 (A) LENGTH: 20 base pairs
8266 (B) TYPE: nucleic acid
8267 (C) STRANDEDNESS: single
8268 (D) TOPOLOGY: linear
8269
8270
--> 8271 (A) NAME/KEY:
--> 8272 (B) LOCATION:
--> 8273 (D) OTHER INFORMATION: 25R-7/23 primer
8274
8275 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:
8276
8277 TACCAAAATG TGTGGTGATG 20
8278

8279 (2) INFORMATION FOR SEQ ID NO:106:
8280
8281 (i) SEQUENCE CHARACTERISTICS:
8282 (A) LENGTH: 20 base pairs
8283 (B) TYPE: nucleic acid
8284 (C) STRANDEDNESS: single
8285 (D) TOPOLOGY: linear
8286
8287
--> 8288 (A) NAME/KEY:
--> 8289 (B) LOCATION:
--> 8290 (D) OTHER INFORMATION: 26-2F primer
8291
8292 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:
8293
8294 AATCACTGAT ACTGGTTTGT 20
8295

8296 (2) INFORMATION FOR SEQ ID NO:107:

INPUT SET: S26434.raw

8297
8298 (i) SEQUENCE CHARACTERISTICS:
8299 (A) LENGTH: 20 base pairs
8300 (B) TYPE: nucleic acid
8301 (C) STRANDEDNESS: single
8302 (D) TOPOLOGY: linear
8303
8304
--> 8305 (A) NAME/KEY:
--> 8306 (B) LOCATION:
--> 8307 (D) OTHER INFORMATION: 26-2R primer
8308
8309 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:
8310
8311 TATACTTACA GGAGCCACAT 20
8312

8313 (2) INFORMATION FOR SEQ ID NO:108:
8314
8315 (i) SEQUENCE CHARACTERISTICS:
8316 (A) LENGTH: 18 base pairs
8317 (B) TYPE: nucleic acid
8318 (C) STRANDEDNESS: single
8319 (D) TOPOLOGY: linear
8320
8321
--> 8322 (A) NAME/KEY:
--> 8323 (B) LOCATION:
--> 8324 (D) OTHER INFORMATION: 27AF-1A primer
8325
8326 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:
8327
8328 CTGTGTGTAA TATTTGCG 18
8329

8330 (2) INFORMATION FOR SEQ ID NO:109:
8331
8332 (i) SEQUENCE CHARACTERISTICS:
8333 (A) LENGTH: 40 base pairs
8334 (B) TYPE: nucleic acid
8335 (C) STRANDEDNESS: single
8336 (D) TOPOLOGY: linear
8337
8338
--> 8339 (A) NAME/KEY:
--> 8340 (B) LOCATION:
--> 8341 (D) OTHER INFORMATION: 27AR/M13R primer
8342
8343 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:
8344
8345 CAGGAAACAG CTATGACGGC AAGTTCTTCG TCAGCTATTG 40
8346

8347 (2) INFORMATION FOR SEQ ID NO:110:

INPUT SET: S26434.raw

8348
8349 (i) SEQUENCE CHARACTERISTICS:
8350 (A) LENGTH: 40 base pairs
8351 (B) TYPE: nucleic acid
8352 (C) STRANDEDNESS: single
8353 (D) TOPOLOGY: linear
8354
8355
--> 8356 (A) NAME/KEY:
--> 8357 (B) LOCATION:
--> 8358 (D) OTHER INFORMATION: 27BF/M13F primer
8359
8360 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:
8361
8362 TGTA AACGA CGGCCAGTGA ATTCTCCTCA GATGACTCCA 40
8363

8364 (2) INFORMATION FOR SEQ ID NO:111:
8365
8366 (i) SEQUENCE CHARACTERISTICS:
8367 (A) LENGTH: 38 base pairs
8368 (B) TYPE: nucleic acid
8369 (C) STRANDEDNESS: single
8370 (D) TOPOLOGY: linear
8371
8372
--> 8373 (A) NAME/KEY:
--> 8374 (B) LOCATION:
--> 8375 (D) OTHER INFORMATION: 27BR/M13R primer
8376
8377 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:
8378
8379 CAGGAAACAG CTATGACCTC TTTGCTCATT GTGCAACA 38
8380

SEQUENCE VERIFICATION REPORT

PATENT APPLICATION US/09/084,471

DATE: 06/04/98
TIME: 15:53:15

INPUT SET: S26434.raw

Line	Error	Original Text
17	Number of Sequences (111) Doesn't Equal Actual Count (110)	(iii) NUMBER OF SEQUENCES: 111
6742	Unknown or Misplaced Identifier	(A) NAME/KEY:
6743	Unknown or Misplaced Identifier	(B) LOCATION:
6744	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 2F primer
6750	Sequence 15 missing	(2) INFORMATION FOR SEQ ID NO:16:
6772	Unknown or Misplaced Identifier	(A) NAME/KEY:
6773	Unknown or Misplaced Identifier	(B) LOCATION:
6774	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 3FII primer
6789	Unknown or Misplaced Identifier	(A) NAME/KEY:
6790	Unknown or Misplaced Identifier	(B) LOCATION:
6791	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 3RII primer
6806	Unknown or Misplaced Identifier	(A) NAME/KEY:
6807	Unknown or Misplaced Identifier	(B) LOCATION:
6808	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 4F/M 13F primer
6823	Unknown or Misplaced Identifier	(A) NAME/KEY:
6824	Unknown or Misplaced Identifier	(B) LOCATION:
6825	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 4R-1A primer
6840	Unknown or Misplaced Identifier	(A) NAME/KEY:
6841	Unknown or Misplaced Identifier	(B) LOCATION:
6842	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 5+6F/M13F primer
6857	Unknown or Misplaced Identifier	(A) NAME/KEY:
6858	Unknown or Misplaced Identifier	(B) LOCATION:
6859	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 5+6R/M13R primer
6874	Unknown or Misplaced Identifier	(A) NAME/KEY:
6875	Unknown or Misplaced Identifier	(B) LOCATION:
6876	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 7F/M13F primer
6891	Unknown or Misplaced Identifier	(A) NAME/KEY:
6892	Unknown or Misplaced Identifier	(B) LOCATION:
6893	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 7R/M13R primer
6908	Unknown or Misplaced Identifier	(A) NAME/KEY:
6909	Unknown or Misplaced Identifier	(B) LOCATION:
6910	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 8F/M13F primer
6943	Unknown or Misplaced Identifier	(A) NAME/KEY:
6944	Unknown or Misplaced Identifier	(B) LOCATION:
6945	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 8RIA primer
6960	Unknown or Misplaced Identifier	(A) NAME/KEY:
6961	Unknown or Misplaced Identifier	(B) LOCATION:
6962	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 9F/M13F primer
6977	Unknown or Misplaced Identifier	(A) NAME/KEY:
6978	Unknown or Misplaced Identifier	(B) LOCATION:
6979	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 9R/M13R primer
6994	Unknown or Misplaced Identifier	(A) NAME/KEY:
6995	Unknown or Misplaced Identifier	(B) LOCATION:
6996	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 10AF primer
7011	Unknown or Misplaced Identifier	(A) NAME/KEY:
7012	Unknown or Misplaced Identifier	(B) LOCATION:
7013	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 10AR/M13R primer
7028	Unknown or Misplaced Identifier	(A) NAME/KEY:

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:53:17

INPUT SET: S26434.raw

Line	Error	Original Text
7029	Unknown or Misplaced Identifier	(B) LOCATION:
7030	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 10BF/M13F primer
7045	Unknown or Misplaced Identifier	(A) NAME/KEY:
7046	Unknown or Misplaced Identifier	(B) LOCATION:
7047	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 10BR/M13R primer
7080	Unknown or Misplaced Identifier	(A) NAME/KEY:
7081	Unknown or Misplaced Identifier	(B) LOCATION:
7082	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 10CRII primer
7097	Unknown or Misplaced Identifier	(A) NAME/KEY:
7098	Unknown or Misplaced Identifier	(B) LOCATION:
7099	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11AF-M13 primer
7114	Unknown or Misplaced Identifier	(A) NAME/KEY:
7115	Unknown or Misplaced Identifier	(B) LOCATION:
7116	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11AR-M13 primer
7131	Unknown or Misplaced Identifier	(A) NAME/KEY:
7132	Unknown or Misplaced Identifier	(B) LOCATION:
7133	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11BF primer
7148	Unknown or Misplaced Identifier	(A) NAME/KEY:
7149	Unknown or Misplaced Identifier	(B) LOCATION:
7150	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11BR primer
7165	Unknown or Misplaced Identifier	(A) NAME/KEY:
7166	Unknown or Misplaced Identifier	(B) LOCATION:
7167	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11CF primer
7182	Unknown or Misplaced Identifier	(A) NAME/KEY:
7183	Unknown or Misplaced Identifier	(B) LOCATION:
7184	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11CR primer
7199	Unknown or Misplaced Identifier	(A) NAME/KEY:
7200	Unknown or Misplaced Identifier	(B) LOCATION:
7201	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11DF primer
7216	Unknown or Misplaced Identifier	(A) NAME/KEY:
7217	Unknown or Misplaced Identifier	(B) LOCATION:
7218	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11DR primer
7233	Unknown or Misplaced Identifier	(A) NAME/KEY:
7234	Unknown or Misplaced Identifier	(B) LOCATION:
7235	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11EF primer
7250	Unknown or Misplaced Identifier	(A) NAME/KEY:
7251	Unknown or Misplaced Identifier	(B) LOCATION:
7252	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11ER primer
7267	Unknown or Misplaced Identifier	(A) NAME/KEY:
7268	Unknown or Misplaced Identifier	(B) LOCATION:
7269	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11FF primer
7284	Unknown or Misplaced Identifier	(A) NAME/KEY:
7285	Unknown or Misplaced Identifier	(B) LOCATION:
7286	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11FR primer
7301	Unknown or Misplaced Identifier	(A) NAME/KEY:
7302	Unknown or Misplaced Identifier	(B) LOCATION:
7303	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11GF primer
7318	Unknown or Misplaced Identifier	(A) NAME/KEY:

SEQUENCE VERIFICATION REPORT

PATENT APPLICATION US/09/084,471

DATE: 06/04/98
TIME: 15:53:18

INPUT SET: S26434.raw

Line	Error	Original Text
7319	Unknown or Misplaced Identifier	(B) LOCATION:
7320	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11GR primer
7335	Unknown or Misplaced Identifier	(A) NAME/KEY:
7336	Unknown or Misplaced Identifier	(B) LOCATION:
7337	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11HF primer
7370	Unknown or Misplaced Identifier	(A) NAME/KEY:
7371	Unknown or Misplaced Identifier	(B) LOCATION:
7372	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11IF primer
7387	Unknown or Misplaced Identifier	(A) NAME/KEY:
7388	Unknown or Misplaced Identifier	(B) LOCATION:
7389	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11IR primer
7404	Unknown or Misplaced Identifier	(A) NAME/KEY:
7405	Unknown or Misplaced Identifier	(B) LOCATION:
7406	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11JF primer
7421	Unknown or Misplaced Identifier	(A) NAME/KEY:
7422	Unknown or Misplaced Identifier	(B) LOCATION:
7423	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: !!JR primer
7438	Unknown or Misplaced Identifier	(A) NAME/KEY:
7439	Unknown or Misplaced Identifier	(B) LOCATION:
7440	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11KF-M13 primer
7455	Unknown or Misplaced Identifier	(A) NAME/KEY:
7456	Unknown or Misplaced Identifier	(B) LOCATION:
7457	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11KR-M13 primer
7472	Unknown or Misplaced Identifier	(A) NAME/KEY:
7473	Unknown or Misplaced Identifier	(B) LOCATION:
7474	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11LF primer
7489	Unknown or Misplaced Identifier	(A) NAME/KEY:
7490	Unknown or Misplaced Identifier	(B) LOCATION:
7491	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11LR primer
7506	Unknown or Misplaced Identifier	(A) NAME/KEY:
7507	Unknown or Misplaced Identifier	(B) LOCATION:
7508	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11MF primer
7523	Unknown or Misplaced Identifier	(A) NAME/KEY:
7524	Unknown or Misplaced Identifier	(B) LOCATION:
7525	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11MR primer
7540	Unknown or Misplaced Identifier	(A) NAME/KEY:
7541	Unknown or Misplaced Identifier	(B) LOCATION:
7542	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11NF-M13 primer
7557	Unknown or Misplaced Identifier	(A) NAME/KEY:
7558	Unknown or Misplaced Identifier	(B) LOCATION:
7559	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11NR-M13 primer
7574	Unknown or Misplaced Identifier	(A) NAME/KEY:
7575	Unknown or Misplaced Identifier	(B) LOCATION:
7576	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11OF primer
7591	Unknown or Misplaced Identifier	(A) NAME/KEY:
7592	Unknown or Misplaced Identifier	(B) LOCATION:
7593	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11OR primer
7608	Unknown or Misplaced Identifier	(A) NAME/KEY:

SEQUENCE VERIFICATION REPORT

PATENT APPLICATION US/09/084,471

DATE: 06/04/98
TIME: 15:53:20

INPUT SET: S26434.raw

Line	Error	Original Text
7609	Unknown or Misplaced Identifier	(B) LOCATION:
7610	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11PF primer
7625	Unknown or Misplaced Identifier	(A) NAME/KEY:
7626	Unknown or Misplaced Identifier	(B) LOCATION:
7627	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11PR primer
7642	Unknown or Misplaced Identifier	(A) NAME/KEY:
7643	Unknown or Misplaced Identifier	(B) LOCATION:
7644	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11QF primer
7659	Unknown or Misplaced Identifier	(A) NAME/KEY:
7660	Unknown or Misplaced Identifier	(B) LOCATION:
7661	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11QR primer
7676	Unknown or Misplaced Identifier	(A) NAME/KEY:
7677	Unknown or Misplaced Identifier	(B) LOCATION:
7678	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11RF primer
7693	Unknown or Misplaced Identifier	(A) NAME/KEY:
7694	Unknown or Misplaced Identifier	(B) LOCATION:
7695	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11RR primer
7710	Unknown or Misplaced Identifier	(A) NAME/KEY:
7711	Unknown or Misplaced Identifier	(B) LOCATION:
7712	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11SF-M13 primer
7727	Unknown or Misplaced Identifier	(A) NAME/KEY:
7728	Unknown or Misplaced Identifier	(B) LOCATION:
7729	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11SR-M13 primer
7744	Unknown or Misplaced Identifier	(A) NAME/KEY:
7745	Unknown or Misplaced Identifier	(B) LOCATION:
7746	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11TF primer
7761	Unknown or Misplaced Identifier	(A) NAME/KEY:
7762	Unknown or Misplaced Identifier	(B) LOCATION:
7763	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11TR primer
7778	Unknown or Misplaced Identifier	(A) NAME/KEY:
7779	Unknown or Misplaced Identifier	(B) LOCATION:
7780	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11UF-M13 primer
7795	Unknown or Misplaced Identifier	(A) NAME/KEY:
7796	Unknown or Misplaced Identifier	(B) LOCATION:
7797	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 11UR-M13 primer
7812	Unknown or Misplaced Identifier	(A) NAME/KEY:
7813	Unknown or Misplaced Identifier	(B) LOCATION:
7814	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 12F/M13F primer
7829	Unknown or Misplaced Identifier	(A) NAME/KEY:
7830	Unknown or Misplaced Identifier	(B) LOCATION:
7831	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 12R/M13R primer
7846	Unknown or Misplaced Identifier	(A) NAME/KEY:
7847	Unknown or Misplaced Identifier	(B) LOCATION:
7848	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 13-2F primer
7863	Unknown or Misplaced Identifier	(A) NAME/KEY:
7864	Unknown or Misplaced Identifier	(B) LOCATION:
7865	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 13-2R primer
7880	Unknown or Misplaced Identifier	(A) NAME/KEY:

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:53:21

INPUT SET: S26434.raw

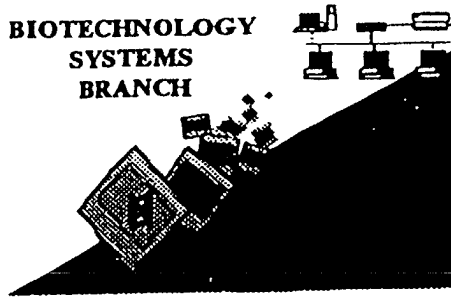
Line	Error	Original Text
7881	Unknown or Misplaced Identifier	(B) LOCATION:
7882	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 14F primer
7897	Unknown or Misplaced Identifier	(A) NAME/KEY:
7898	Unknown or Misplaced Identifier	(B) LOCATION:
7899	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 14AR primer
7914	Unknown or Misplaced Identifier	(A) NAME/KEY:
7915	Unknown or Misplaced Identifier	(B) LOCATION:
7916	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 15-2F primer
7931	Unknown or Misplaced Identifier	(A) NAME/KEY:
7932	Unknown or Misplaced Identifier	(B) LOCATION:
7933	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 15FUT/M13-R primer
7948	Unknown or Misplaced Identifier	(A) NAME/KEY:
7949	Unknown or Misplaced Identifier	(B) LOCATION:
7950	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 16AF primer
7965	Unknown or Misplaced Identifier	(A) NAME/KEY:
7966	Unknown or Misplaced Identifier	(B) LOCATION:
7967	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 16AR primer
7982	Unknown or Misplaced Identifier	(A) NAME/KEY:
7983	Unknown or Misplaced Identifier	(B) LOCATION:
7984	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 17F primer
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8034	Unknown or Misplaced Identifier	(B) LOCATION:
8035	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 18R/M13R primer
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8051	Unknown or Misplaced Identifier	(B) LOCATION:
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8068	Unknown or Misplaced Identifier	(B) LOCATION:
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8118	Unknown or Misplaced Identifier	(A) NAME/KEY:
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8152	Unknown or Misplaced Identifier	(A) NAME/KEY:

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PATENT APPLICATION US/09/084,471DATE: 06/04/98
TIME: 15:53:23

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8169	Unknown or Misplaced Identifier	(A) NAME/KEY:
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8373	Unknown or Misplaced Identifier	(A) NAME/KEY:
8374	Unknown or Misplaced Identifier	(B) LOCATION:
8375	Unknown or Misplaced Identifier	(D) OTHER INFORMATION: 27BR/M13R primer

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